

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A reciprocating engine comprising:

a first piston ring adjacent to a top surface of a piston defining a combustion chamber;

a second piston ring which defines an annular gas chamber in cooperation with said first piston ring and which is adjacent to said first piston ring such that a pressure-receiving area of a side surface of said piston in said annular gas chamber becomes greater on a thrust side than on a counter-thrust side; and

a plurality of gas passages which are disposed in an inner surface of a cylinder in such a manner as to be juxtaposed in a circumferential direction of the inner surface of said cylinder and which allow said annular gas chamber to communicate with said combustion chamber on the thrust side,

wherein said plurality of gas passages comprise a first recessed portion which is disposed in such a manner as to oppose a center portion of said piston concerning a direction which is perpendicular to both a reciprocating direction of said piston and an axial direction of a piston pin when said piston is at a top dead center or during a starting period of the fall from the top dead center, and a pair of second recessed portions, said first recessed portion being disposed between said pair of second recessed portions in said circumferential direction.
2. (Previously Presented) The reciprocating engine according to claim 1, wherein said plurality of gas passages are disposed in the inner surface of said cylinder at positions to allow

said annular gas chamber to communicate with said combustion chamber when said piston is at the top dead center or during the starting period of the fall from the top dead center.

3. (Previously Presented) The reciprocating engine according to claim 2, wherein at least one of said recessed portions is adapted to allow only said annular gas chamber to communicate with said combustion chamber.

4. (Previously Presented) The reciprocating engine according to claim 2, wherein said plurality of gas passages are disposed in the inner surface of said cylinder at positions for allowing said annular gas chamber to communicate with said combustion chamber during the starting period of the fall of said piston from the top dead center.

5. (Previously Presented) The reciprocating engine according to claim 2, wherein at least one of said recessed portions is disposed in the inner surface of said cylinder at a position for allowing said annular gas chamber to communicate with said combustion chamber when said piston is positioned at the top dead center.

6.-11. (Cancelled)

12. (Previously Presented) The reciprocating engine according to claim 2, wherein at least one of said recessed portions has a partially concave spherical surface.

13.-17. (Cancelled)

18. (Previously Presented) The reciprocating engine according to claim 2, wherein said at least one of said recessed portions has a depth equal to that of said recessed portion adjacent to that recessed portion in the circumferential direction.

19. (Cancelled)

20. (Previously Presented) The reciprocating engine according to claim 12, wherein said pair of recessed portions have mutually similar shapes.

21.-22. (Cancelled)

23. (Previously Presented) The reciprocating engine according to claim 2, wherein the opening plane of the space defined by said at least one of said recessed portions has a diameter different from the opening plane of said space defined by said other one of said recessed portions.

24.-25. (Cancelled).

26. (Previously Presented) The reciprocating engine according to claim 2, wherein the opening plane of the space defined by said at least one of said recessed portions has a diameter equal to that of the opening plane of said space defined by another one of said recessed portions.

27. (Currently Amended) The reciprocating engine according to claim 1, wherein the defining surface of said first piston ring defining said annular gas chamber is disposed so as to be parallel to a plane perpendicular to the reciprocating direction.

28. (Previously Presented) The reciprocating engine according to claim 2, wherein the diameter of the opening plane of the space defined by said at least one of said recessed portions is greater than a depth of that recessed portion.

29.-33. (Cancelled)

34. (Previously Presented) The reciprocating engine according to claim 1, wherein said piston pin for coupling said piston and said connecting rod are off-centered toward the counter-thrust side.

35.-39. (Cancelled)